**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A system for collaborative processing with distributed applications, comprising:

at least one application context in which an application is executed, the application context including an application CGI for managing the application, and a communication interface on which application data is communicated as messages;

a messaging bus configured to communicate the messages for processing by the application;

at least one gateway context including a gateway CGI configured for maintaining two-way asynchronous communication between the messaging bus and a remote application through a firewall, said remote application being executed by a client ~~to a web server~~, the gateway CGI ~~being~~ configured to maintain the two-way asynchronous communication until termination by the remote application or by the gateway CGI; and

~~the~~ a web server, said web server ~~being~~ configured to establish ~~a~~ one socket connection with said client through said firewall ~~in response to~~ and configured to initialize the gateway CGI after receiving an HTTP request to initialize the gateway CGI from said ~~client~~ remote application over said one socket connection during a single HTTP transaction with the remote application~~;~~

wherein the gateway CGI is configured to perform operations to enable said two-way asynchronous communication between said messaging bus and said remote application ~~occurring~~ to occur within the single HTTP transaction and over said one socket connection.

2. (Cancelled)

3. (Previously Presented) The system of claim 1, wherein the web server is in communication with the application CGI.

4. (Original) The system of claim 3, wherein the application context includes an administration CGI in communication between the web server and the application CGI for receiving information about the application and providing a document for transmission by the web server.

5. (Cancelled)

6. (Original) The system of claim 1, further comprising a messaging bus extension adapted for maintaining direct socket connections between the messaging bus and remote applications.

7. (Original) The system of claim 6, wherein the messaging bus extension includes a multiplexer for multiplexing one or more direct socket connections to the messaging bus.

8. (Original) The system of claim 1, wherein the messaging bus is configured to communicate with one or more other messaging busses, and wherein each other messaging bus is resident on a remote host.

9. (Original) The system of claim 8, wherein the messaging bus is configured to communicate according to a multicast protocol.

10. (Original) The system of claim 1, wherein each application is configured to publish and subscribe message data with other applications via the messaging bus.

11. (Original) The system of claim 6, wherein the messaging bus extension is configured to publish and subscribe message data between applications.

12. (Original) The system of claim 1, wherein the messaging bus includes a filter for filtering the message data.

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13. (Original) The system of claim 12, wherein the filter is configured to filter messages according to a filter criteria executed by each application.

14. (Currently Amended) The system of claim 4, wherein the administration ~~GGI~~ CGI is configured to format application data retrieved from the application through the application CGI into presentation data that is readable by another application.

15. (Original) The system of claim 14, wherein the presentation data is in a format that is readable by a web browser.

16. (Original) The system of claim 14, wherein the format of the presentation data is in HTML.

17. (Previously Presented) The system of claim 1, wherein the remote application generates presentation data that is readable by another application.

18. (Original) The system of 17, wherein the presentation data is in a format that is readable by a web browser.

19. (Original) The system of claim 18, wherein the format of the presentation data is in HTML.

20. (Previously Presented) The system of claim 17, wherein a web browser is configured to read the presentation data.

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21. (Currently Amended) A system for collaborative processing with distributed applications, comprising:

at least one application context in which an application is executed, the application context including an application CGI for managing the application, and a communication interface on which application data is communicated as messages;

a messaging bus configured to communicate the messages for processing by the application;

at least one gateway context including a gateway CGI configured for maintaining two-way asynchronous communication between the messaging bus and a remote application through a firewall, said remote application being executed by a client ~~to a web server~~, the gateway CGI ~~being~~ configured to:

    a)    receive a request from the remote application;

    b)    execute operations associated with the gateway CGI, wherein the operations are configured to perform the two-way asynchronous communication with the remote application; and

    c)    repeat at least one of the operations in step b) until termination of the gateway CGI by the remote application or by the gateway CGI; and

~~the~~ <u>a</u> web server, said web server ~~being~~ configured to establish ~~a~~ <u>one</u> socket connection with said client through said firewall ~~in response to~~ <u>and configured to initialize the gateway CGI</u> <u>after receiving</u> an HTTP request <u>to initialize the gateway CGI</u> from said ~~client~~ <u>remote application</u> <u>over said one socket connection during a single HTTP transaction with the remote application</u>~~,~~<u>;</u>

<u>wherein the gateway CGI is configured such that the operations executed by the gateway CGI enable</u> said two-way asynchronous communication between said messaging bus and said remote application ~~occurring~~ <u>to occur within the single HTTP transaction and</u> over said <u>one</u> socket connection.

22. (New) A storage medium storing one or more computer programs for causing a host computer to execute a process, said one or more computer programs including program code for a web server and a gateway CGI, said process comprising:

opening, by the web server, one socket connection with a client computer;

initializing, by the web server, the gateway CGI after receiving an HTTP request to initialize the gateway CGI from the client computer over the one socket connection during a single HTTP transaction with the client computer;

performing, by the gateway CGI, operations to enable two-way asynchronous communication between the host computer and the client computer to occur within the single HTTP transaction and over the one socket connection;

ending, by the gateway CGI, the performance of the operations after receiving a termination request from the client computer; and

closing, by the web server, the one socket connection.